

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1, 4, 6 and 7 have been amended. Claims 2, 3 and 5 have been cancelled. Claims 8 and 9 have been added. Claims 1, 4, 6 and 7-9 are pending and under consideration.

CLAIM REJECTIONS

Claims 1 and 3-7 were rejected under 35 USC 102(b) as being anticipated by Okada (US 2003/0110860) (hereinafter "Okada").

Claim 2 was rejected under 35 USC 103(a) as being unpatentable over Okada in view of Miyazaki et al. (JP 2003-146196) (hereinafter "Miyazaki").

Amended claim 1 recites: "...the sensor unit includes, as an electric power supply section to drive the sensor section and the signal transmitting circuit, an electric power receiving section to receive an electric power wirelessly, and the sensor unit mounting device includes a fixing ring mounted on the stationary race member, a socket portion provided in the fixing ring to allow the sensor unit to be removably inserted in a radial direction of the bearing, and a retaining portion provided in the fixing ring or the socket portion to elastically retain the sensor unit inserted into the socket portion." Support for this amendment may be found in at least original claims 2 and 5, and further in the specification of the present application at page 11, lines 26-29.

The Office Action relies on Okada to show the sensor unit mounting device feature of claim 1. Specifically, the Office Action relies on Figures 9A and 9B of Okada and the accompanying text in paragraphs [0119] – [0121]. However, the portions of Okada cited by the Examiner, or any other portion, do not discuss the socket portion provided in the fixing ring to allow the sensor unit to be removably inserted in a radial direction of the bearing or the retaining portion provided in the fixing ring or the socket portion to elastically retain the sensor unit inserted into the socket portion recited in claim 1.

In contrast to claim 1, Okada only discusses that the transmission unit 5 is positioned in face-to-face relation with an end face of the outer member 1. See Okada, paragraph [0119]. Okada makes no mention of a socket unit or other comparable feature to allow the transmission unit 5 to be removable inserted, as is recited in claim 1.

Further, the Examiner relies on sealing member 38 of Okada to show the retaining portion recited in claim 1. However, in contrast to claim 1, the sealing member 38 in Okada is

used to prevent foreign matter from entering into a gap between the ring member 19 and the magnet member 34 of the multi-pole magnet 18, both forming the respective parts of the coil/magnetic element combination 17, to thereby avoid damages to the rotation detecting sensor 4. See Okada, paragraph [0120]. Specifically, the sealing magnet of Okada protects the rotation detecting sensor 4 of Okada, rather than the transmission unit 5. It is the transmission unit 5 of Okada that the Examiner is relying on to show the sensor unit of claim 1, not the rotation detecting sensor 4.

The secondary reference Miyazaki, which was relied on to show a wireless power receiving section, also does not discuss a socket unit or other comparable feature to allow a transmission unit to be removably inserted, as is recited in claim 1.

This technical feature of claim 1 provides that since the sensor unit is removably mounted on the bearing through the sensor unit mounting device, the sensor unit 9 can be easily removed from the bearing. In such case, since no wiring is employed for the sensor signal and also for the electric power supply, the removing of the sensor unit can be easily accomplished. Thus, by the synergistic effect of the sensor unit mounting device, enabling the removable mounting of the sensor unit, and the wireless system, easy mounting and removing of the sensor unit can be achieved. Because of this, maintenance of the bearing can be performed with the sensor unit removed and, also, replacement of the sensor unit with a different sensor unit can easily be performed so that a different target of detection can be detected. By way of example, where different targets of detection are desired to be detected with testing equipments, a plurality of sensor units each for detecting a particular target of detection are prepared and replaced in turn to obtain a wide variety of detection results.

Claims 2, 3 and 5 have been cancelled. Claims 4, 6 and 7 depend on claim 1 and are therefore believed to be allowable for at least the foregoing reason. Claims 4, 6 and 7 have also been amended to improve the form of the claims, no new matter has been added.

Withdrawal of the foregoing rejections is requested.

NEW CLAIMS

Claims 8 and 9 have been added to present alternate features of the present invention. Support for new claims 8 and 9 may be found in the specification at page 11, line 29 through page 12, line 2. Dependent claims 8 and 9 recite the manner of transmitting sensor signals from the sensor sections.

No new matter has been added, and entry and consideration are respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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